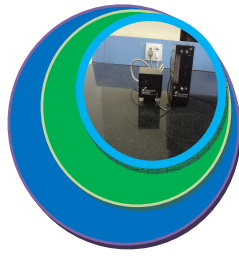


BMM Ispat Ltd.,



**Danapur Village, Hospet Taluk,
Bellary District, PIN-583222, Karnataka**



ENVIRONMENT MONITORING REPORT

Stage 2 Units

For

OCTOBER-2015

Prepared By



GLOBAL ENVIRONMENT & MINING SERVICES

NABL Accredited Laboratory

(Consulting Engineers, Mine Designers, Geologists & Surveyors)

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PREFACE

The Industries should monitor environmental parameters as per the frequency and locations given in the CFE/CFO. And the same should be submitted on every month to the respective pollution control board.

As part of the conditions and inherent concern on health of the employees and surroundings *M/s. BMM Ispat Ltd.*, as appointed *M/s. Global Environment & Mining Services, HOSPET*, to carry out the environmental pollution monitoring on Fugitive monitoring within the plant, Stack monitoring and Noise pollution and submit the same to the Pollution Control Board.

Accordingly, *M/s. Global Environment & Mining Services, HOSPET*, carried out the pollution monitoring as per the standard sampling methods prescribed by CPCB, for Fugitive monitoring within the plant, Stack monitoring for all chimneys, and Noise monitoring as per the CFO. These monitoring has been carried out in a frequency as mentioned in the CFO and the same report is being submitted to the Board.

We sincerely thank to officials of *M/s. BMM Ispat Ltd.*, for their valuable co-ordination & support during the sampling and reporting.

for GLOBAL Environment & Mining Services

Place: Hospet
Date: 05.11.2015

S. Kameswara Rao
(Managing partner)

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The journey of the BMM Group is a reflection of the path tread by every entrepreneur who believes in the human potential and one's own ability to bring about a life affirming change that transcends time. BMM Group was born out of this committed belief of Late ShriUdaichandSinghi.

Entrenched in the Indian ethos, with an astute understanding of market needs, values and sensibilities *Mr. Dinesh Kumar Singhi* inherited the legacy from his father and has built the BMM Group on sound fundamentals since 1998. He steered the company towards growth by being the first mining company to establish a power generation plant for captive use, and creating a steel plant from the captive ore mine. Over the last 12 years, BMM has been able to add value to every relationship under his able and dynamic leadership.

Today, BMM is a 2000 CroresCompany due to its focus on market orientation and optimal usage of technology to achieve process efficiency and value addition. BMM has always believed in the principle of sharing and hence continues to transfer this benefit derived from sustained growth to its employees, partners and associates. The unique value proposition that defines the very fabric of the BMM culture is the firm's belief in unleashing this 'potential in tones' in terms of its human capital, continuous growth and consistent benefits to its stakeholders.

The human potential at BMM is reflected in the depth of domain expertise across diverse sectors and dynamism of youth at various levels in the Organization. Business operations lead by professionals with decades of market understanding and a dynamic team enables BMM to deliver superior product quality. It is this human potential that keeps BMM attuned to scaling new heights and meeting customer expectations. While consistently adding value to its partners, BMM is sensitive to its responsibility towards the environment by implementing best practices in its Business Operations and contribution to society through various social Endeavours'.

BMM has a commitment of being a good Corporate Citizen and is committed to achieving business goals through ethical means. BMM hence has been able to have deeper relevance to society by creating value that is inclusive and truly benefits all.



1.2 PROMOTERS OF THE PROJECT

BMM Group, one of the leading Steel, Cement & Mining companies in India that has achieved the present level under the leadership and guidance of Sri Dinesh Kumar Singh, the Founder & Director of the group, is promoting the project. His vision is to globalize the company business and do value addition by operating responsibly and in a sustainable manner in exploring, exploiting, excavating and processing minerals followed by setting up steel plant facilities.

BMM is a step towards forward integration to set up new Rolling Mill. The corporate office of the project is located as follows:

BMM ISPAT LIMITED

(Registered Office & Works)

#114, Danapura

Hospet - 583 222

Bellary Dist., Karnataka

Phone +91 83942 44681/82/83/9972309417

Fax +91 080-30723604.

1.3 BRIEF PROFILE OF THE GROUP MINES.

TMT Bars:

Steel for TMT bars is fully kilned in a furnace. The molten steel is void of slag with the inclusion of argon gas. The chemistry and temperature is homogenized to ensure uniform composition. The liquid steel is then tapped into the concast. (Continuous of Casting Machine).

Billet Quality for TMT Steel:

- No impurities Viz. Slag and refractory inclusions.
- No piping and blowholes.
- Superior Surface finishes without defects.
- Consistent properties throughout its length.

Steel:

The steel plant setup in 2006 as per BMM'S aspirations now produces 75,000 TMT bars annually. BMM ISPAT LTD manufactures high strength TMT steel bars for concrete reinforcement, which are internationally competitive and highly ductile for safety in structures.

Properties of BMM Steel:

- Steel is Corrosion Resistance, owing to its water quenching methods.
- With 0.25%, carbon BMM TMT has an excellent welding ability.
- Stringent Control over chemical composition prevents brittleness.
- TMT bonds best with concrete to form strong reinforcement.

BMM Cement

BMM Cements Limited an integral part of the BMM Group has successfully commissioned its new cement plant with an annual capacity of one Million Tons per annum.

1.4 Site Location

BMM ISPAT LIMITED is located at Danapur about 15 Kms away from Hospet in Karnataka. The plant site can be connected by national highway, viz. NH-13. The plant is 1 km away from the NH-13 near Danapura village. The nearest railway station is

Hospet;Bangalore is at a distance of 300 kms. Seaport is Belikere and Karwar, the nearest Airport is in the private sector belonging to JSW, a Jindal Group company at Thoranagallu (Vidyanagar).

M/s. BMM ISPAT Ltd., Has accorded Environmental Clearance for 2.0 MTPA Integrated Steel Plant, with the following facilities.

S.N.	Items	Capacity
1	Iron ore beneficiation plant	3.40 MTPA
2	Palletizing Plant	1.20 MTPA
3	DRI Plant	0.70 MTPA
4	Coke Oven	0.80 MTPA
5	Sinter Plant	2.50 MTPA
6	Blast furnace	1.70 MTPA
7	EAF & BOF Steel making shop	2.30 MTPA
8	Continuous casting machines Slab Caster Billet Caster	1.10 MTPA 1.10 MTPA
9	Rolling mills : Hot strip mill Structurals/wire rods	1.00 MTPA 1.00 MTPA
10	Oxygen Plant	2x500 TPD
11	Calcining	1,080 TPD
12	Cement Plant	1.40 MTPA
13	Power Plant	230 MW

Out of the above units presently **4 x 500 TPD Sponge Iron Plants** and **1X70 MW Thermal Power Plants** have been commissioned on August 2011 and Beneficiation plant-2, Pellet Plant-2 are commissioned on March 2012. 2X70 MW Thermal based power plants have commissioned on Jan 2013, EAF, Steel Making Shop, CCM, Rolling Mill, Oxygen plants are commissioned on August 2015, other plants are under construction. Hence environmental monitoring has being carried out for 4 x 500 TPD sponge iron plants, 1X70 MW Thermal Power Plant, 1.3MTPA Beneficiation, 1.2MTPA Pellet Plant, 2X70MW Power plant, EAF, SMS, CCM, and RML every Month.

1.5 The report includes environmental monitoring data collected at above site for the month of **OCTOBER-2015**. The Parameters monitored are:

- ❖ Fugitive Dust Level
- ❖ Stack Emission

Important Note: Ambient Air Quality & Water Quality data are common for both Stage-I & Stage-II. Hence, Please refers Stage-I report for the same.

1.6 Study:

The data collection programme is given below:

1.7 Fugitive Emission Monitoring

Ambient Air Quality was monitored 40 samples were collected from the analyzed for SPM analyzed by gravimetric method. Work Zone Air quality was monitored at all Plant area, and material handling area air quality status given in *Annexure – 1/A (1st Fort night) & Annexure – 1/B (2nd Fort night)* .

1.8 Stack Monitoring

Vayubhodhan Stack sampler VSS1 stack monitoring was used for drawing the flue gas. Sulphur dioxide and oxides of Nitrogen in the flue gas were sampled by bubbling flue gas in 3% H₂O₂ and 0.1N NaOH solution respectively and the analysis of the pollutants were done as per the Indian Standard procedures prescribed by CPCB/BIS. Stack Emission level was monitored as per the statutory requirement on twice in a month, and the results given in *Annexure – 2/A (1st Fort night) & Annexure – 2/B (2nd Fort night)*

1.9 Stack Emissions Monitoring Methodology

1.10 Sampling Procedure

Pre Sampling Activities

Weigh the properly conditioned thimble/filter and place it into the clean, air tight Container. Designate appropriate label or ID No. to each thimble/filter container. Particulate matter emission of “Stack Monitoring – Material and Methodology for iskinetic Sampling.

Field activity starts with the collection of detailed information from the industry about the products, raw materials, fuels, and stack dimensions.

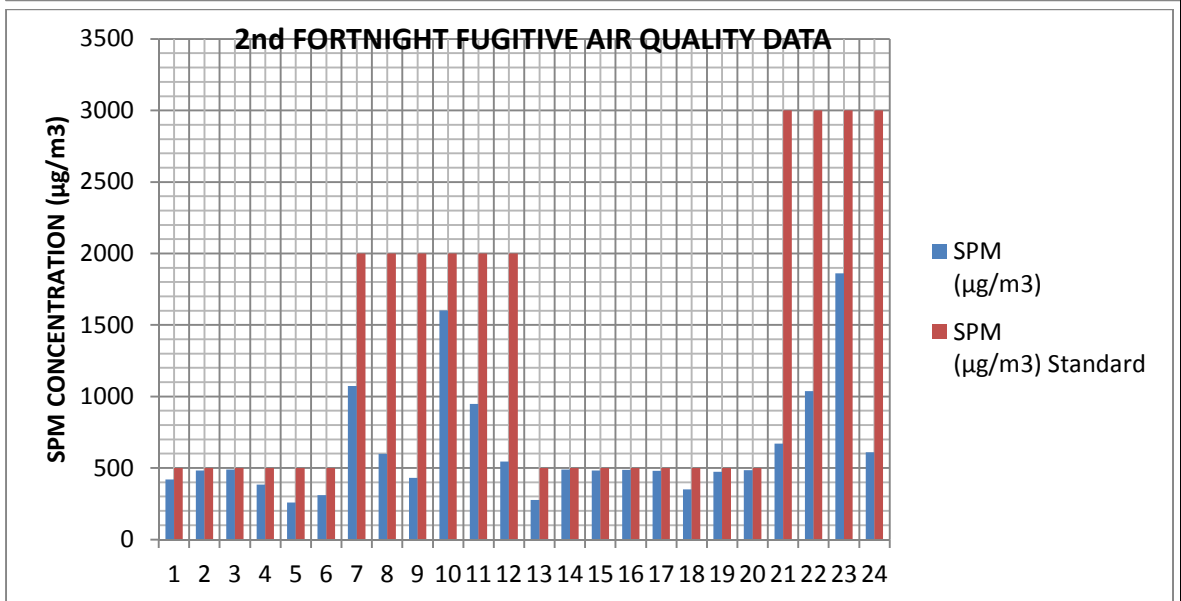
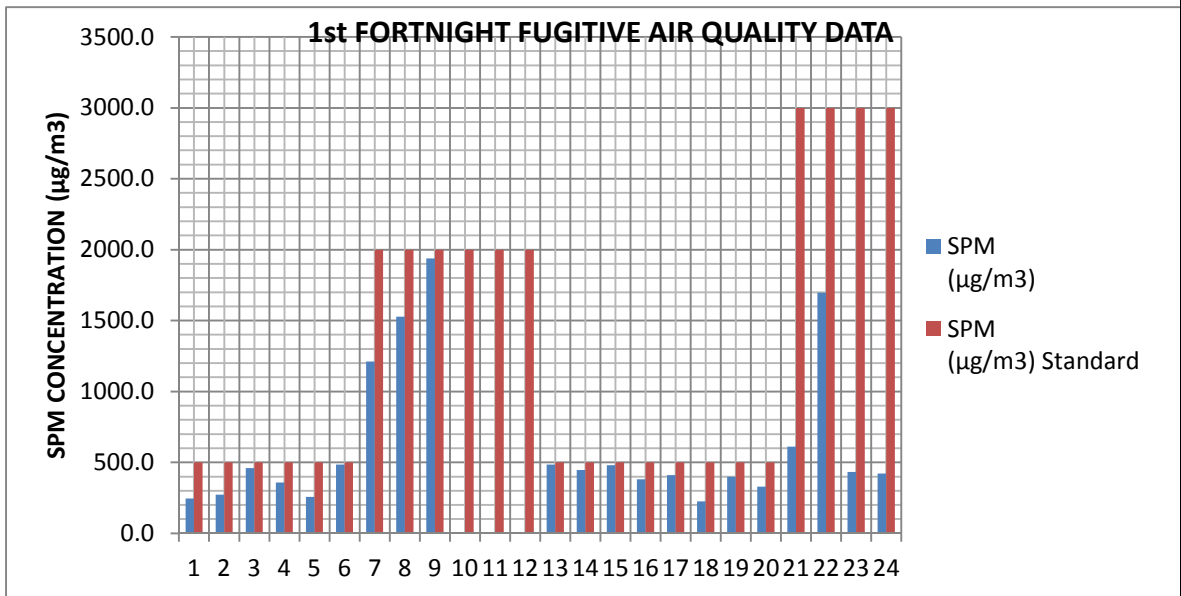
1.11 Traverse Point Calculation

Calculate the traverse point and accordingly mark the distance from tip of the Nozzle, on Pitot tube and probe. Do not forget to add the collar length of port to the calculated traverses. For detailed calculation of “Stack Monitoring– Material and Methodology for iskinetic sampling.

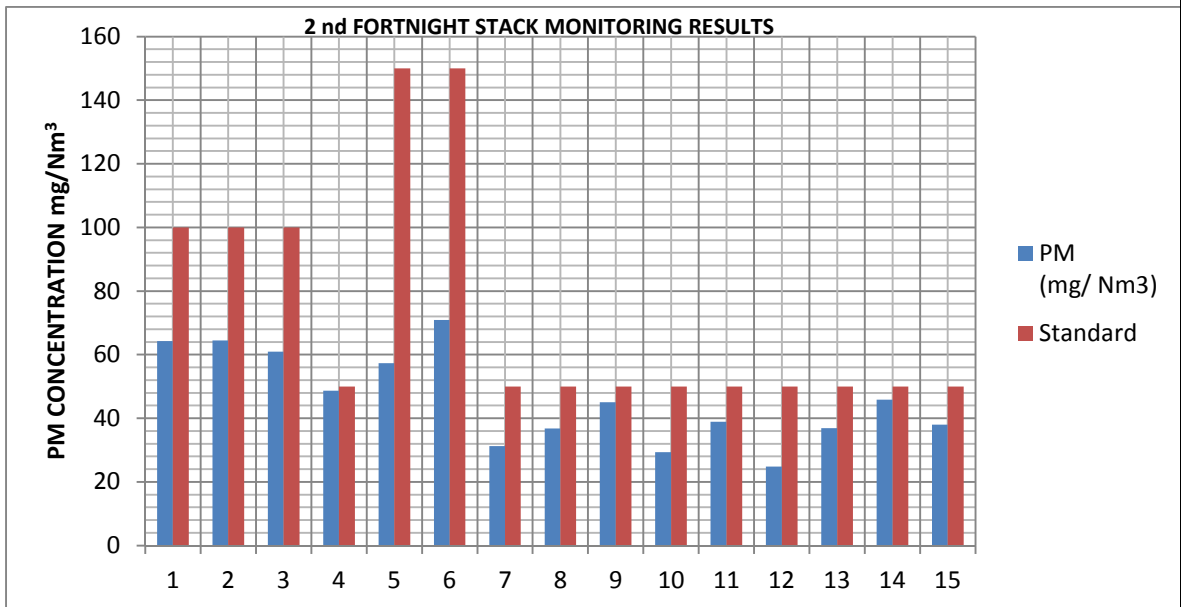
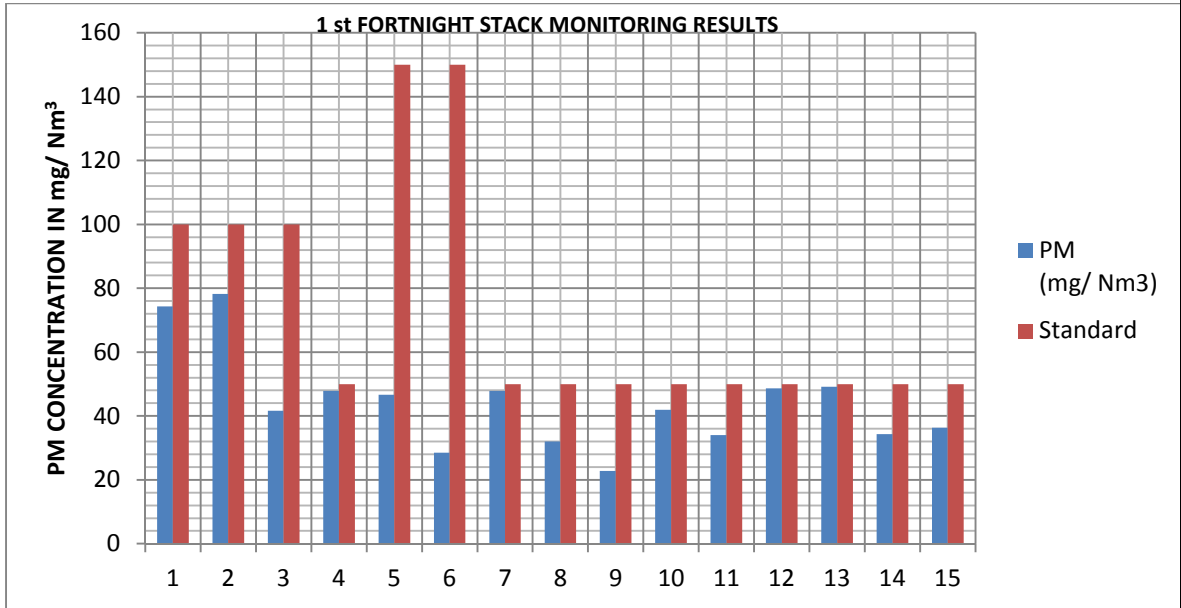
1.12 Determination of Dust Concentration

Determine the mass of dust collected in the thimble by difference i.e. weighing the thimble before and after the run. Dry the thimble in an oven for about 2 hours at 120° C prior to sampling. After sampling, cool, dry and again weigh the thimble along with dust maintaining the same condition as prior to sampling

1.13 Fortnightly fugitive air quality was monitored all plant area SPM value minimum **225.2 µg/m³**, maximum value **1938.1 µg/m³**,and average value **629.39 µg/m³**. The Fugitive Monitoring results of . 1st Fortnight & 2nd Fortnight is mentioned in graph.



1.14 Stack emission level was monitored all chimneys’ PM values (mg/Nm^3) 1st and 2nd Fort Night Minimum Value **22.8 mg/Nm^3** , Maximum Value **78.20 mg/Nm^3** & Average Value **43.69 mg/Nm^3** . The Stack Monitoring results of 1st Fortnight & 2nd Fortnight is mentioned in graph.



1.15 Conclusion

All the monitored Environmental parameters were found to be well within the statutory norms– and the same are enclosed as follows.



Annexure-1/A (1 st Fort Night)

FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING OCTOBER-2015

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary District.
2. Sample collected by : GLOBAL Environment & Mining Services, Hospet.
3. Particulars of sample collected : RDS Sampler (AAS 217 BL)
4. Report to sent : **05.11.2015**
5. Method adopted : IS 5182 (Part 23) : 2006

Sl.NO.	Location / Plant	Date Of Monitoring	Date Of Sample Receipt	SPM ($\mu\text{g}/\text{m}^3$)	Standard
I. Beneficiation Plant-II					
1.	Ball Mill Area	05.10.2015	06.10.2015	244.9	500
2.	Iron Ore Hopper (Near monsoon shed)	05.10.2015	06.10.2015	272.9	500
3.	Concentrate Thickener	05.10.2015	06.10.2015	460.0	500
II. Pellet Plant-II					
4.	PR-6	06.10.2015	07.10.2015	358.6	500
5.	Annual Cooler	06.10.2015	07.10.2015	256.4	500
6.	CGB Building	06.10.2015	07.10.2015	485.8	500
III. Sponge Iron Division -2 (Kiln 1 & 2)					
7.	Control room	07.10.2015	08.10.2015	1211.2	2000
8.	Near Weigh bridge (dispatch)	07.10.2015	08.10.2015	1527.1	2000
9.	Pellet Storage bin	07.10.2015	08.10.2015	1938.1	2000
IV. Sponge Iron Division -2 (Kiln 3 & 4)					
10.	Near Control room	08.10.2015	Rain coming work has stopped		2000
11.	Near Coal crusher	08.10.2015			2000
12.	Near Product bin	08.10.2015			2000
V. Wagon Tipper/RMHS					
13.	Near Tipping point	09.10.2015	10.10.2015	484.4	500
14.	Monsoon Shed	09.10.2015	10.10.2015	445.3	500
15.	MCC room (2 nd Gate)	09.10.2015	10.10.2015	481.1	500
VI. Power Plant-70 MW					
16.	70MW-DM Plant (Near R.O. Plant)	10.10.2015	12.10.2015	380.9	500
17.	Coal Screen (near gate weigh bridge)	10.10.2015	12.10.2015	409.4	500
18.	CFBC boiler	10.10.2015	12.10.2015	225.2	500
VII. 2X70MW Power Plant					
19.	Near Boiler	12.10.2015	13.10.2015	399.5	500
20.	Near Coal storage Shed	12.10.2015	13.10.2015	328.7	500
VIII . SMS Area					
21	Stock House/Vibro feeders	12.10.2015	13.10.2015	612.2	3000
22	Laddle Tapping	13.10.2015	14.10.2015	1697.6	3000
23	Slag Pouring Area	13.10.2015	14.10.2015	433.9	3000
IX. BAR MILL					
24	Near Reheating Furnace	13.10.2015	14.10.2015	422.3	3000

Note: SPM - Suspended Particulate matter ($\mu\text{g}/\text{m}^3$) **INFERENCE:** The Measured Values are within the limits

Analyzed By
Environmental Engineer
(G.Aarathi)

Authorised signatory
Technical Manager
(K.Ramakrishna Reddy)

Note:

1. The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after one month from the date of issue of test certificate unless otherwise specified.
3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not used any advertising media without special permission in writing.
4. Total liability of our laboratory is limited amount. Any dispute arising out of this report is subject to Hospet jurisdiction only.

**Annexure-1/B (2nd Fort Night)****FORTNIGHTLY FUGITIVE AIR QUALITY DATA MONITORING OCTOBER-2015**

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary District
2. Sample collected by : GLOBAL Environment & Mining Services
3. Particulars of sample collected : RDS Sampler (AAS 217 BL)
4. Report to be sent : **05.11.2015**
5. Method adopted : IS 5182 (Part 23) : 2006

Sl.NO.	Location / Plant	Date Of Monitoring	Date Of Sample Receipt	SPM ($\mu\text{g}/\text{m}^3$)	Standard
I. Beneficiation Plant-II					
1.	Ball Mill Area	19.10.2015	20.10.2015	420.6	500
2.	Iron Ore Hopper (Near monsoon shed)	19.10.2015	20.10.2015	482.8	500
3.	Concentrate Thickener	19.10.2015	20.10.2015	488.2	500
II. Pellet Plant-II					
4.	PR-6	20.10.2015	21.10.2015	384.6	500
5.	Annual Cooler	20.10.2015	21.10.2015	258.9	500
6.	CG Building	20.10.2015	21.10.2015	311.0	500
III. Sponge Iron Division -2 (Kiln 1 & 2)					
7.	Control room	21.10.2015	23.10.2015	1073.2	2000
8.	Near Weigh bridge (dispatch)	21.10.2015	23.10.2015	599.9	2000
9.	Pellet Storage bin	21.10.2015	23.10.2015	430.4	2000
IV. Sponge Iron Division -2 (Kiln 3 & 4)					
10.	Near Control room	23.10.2015	24.10.2015	1601.8	2000
11.	Near Coal crusher	23.10.2015	24.10.2015	948.3	2000
12.	Near Product bin	23.10.2015	24.10.2015	545.2	2000
V. Wagon Tipper/RMHS					
13.	Near Tipping point	24.10.2015	26.10.2015	276.1	500
14.	Monsoon Shed	24.10.2015	26.10.2015	489.1	500
15.	MCC room (2 nd Gate)	24.10.2015	26.10.2015	482.3	500
VI. Power Plant-70 MW					
16.	70MW-DM Plant (Near R.O. Plant)	26.10.2015	27.10.2015	486.8	500
17.	Coal Screen (near gate weigh bridge)	26.10.2015	27.10.2015	481.2	500
18.	CFBC boiler	26.10.2015	27.10.2015	350.5	500
VII. 2X70MW Power Plant					
19.	Near Boiler	27.10.2015	28.10.2015	472.8	500
20.	Near Coal storage Shed	27.10.2015	28.10.2015	484.1	500
VIII . SMS Area					
21	Stock House/Vibrofeeders	27.10.2015	28.10.2015	670.5	3000
22	Ladle Tapping	28.10.2015	29.10.2015	1038.5	3000
23	Slag Pouring Area	28.10.2015	29.10.2015	1860.5	3000
IX BAR MILL					
24	Near Reheating Furnace	28.10.2015	29.10.2015	610.2	3000

Note: SPM - Suspended Particulate matter ($\mu\text{g}/\text{m}^3$) **INFERENCE:** The Measured Values are within the limits.

Analyzed By
Environmental Engineer
G.Aarathi

Authorised signatory
Technical Manager
K.Ramakrishna Reddy

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STACK MONITORING RESULTS

Annexure - 2/A

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary district.
 2. Sample collected by : GLOBAL Environment & Mining Services
 3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1 **Month: October - 2015 (1st Fort Night)**

Si. No	Stack Attached to	Date of Monitoring	Fuel Used	Ta °C	TS °C	V m/Sec	HEIGHT (m)	Diameter (m)	Results			Standards PM (mg/ Nm ³)	
									PM	SO ₂ mg/Nm ³	NO ₂ mg/ Nm ³		
1	Pellet Plant-2 ESP	05.10.2015	Coal	Shutdown									50
2	2X500TPD Sponge iron kiln1&2 ESP	06.10.2015	Coal	29	146	5.94	70	3.00	74.3	62.41	2.86	100	
3	2X500TPD Sponge iron kiln3&4 ESP	07.10.2015	Coal	30	150	5.94	70	3.00	78.2	56.26	7.28	100	
4	1 X 70MW-CFBC Boiler ESP	08.10.2015	Coal	30	153	5.81	70	3.00	41.6	60.48	10.24	100	
5	2X70MW -CFBC Boiler ESP	09.10.2015	Coal	30	162	6.25	110	8.00	47.8	56.87	15.02	50	
6	SMS	10.10.2015	Coal	29	110	13.19	86	2.40	46.6	-	-	150	
7	Barmill	12.10.2015	-	30	252	7.63	87	3.00	28.5	-	-	150	
Chimneys attached to Bag Filter (De dusting Units)													
Beneficiation Plant-2													
1	Iron Ore Cone Crusher	NOT IN OPERATION										50	
2	Iron Ore Screening	NOT IN OPERATION										50	
Pellet Plant-2													
3	Additive grinding mill	SHUTDOWN										50	
4	Mixer building	SHUTDOWN										50	
5	Pellet discharge point	SHUTDOWN										50	
2 X 500 TPD Sponge Iron Kiln 1 & 2													
6	Cooler Discharge -1	07.10.2015	---	---	---	---	30	1.20	47.8	----	----	50	
7	Cooler Discharge -2	07.10.2015	---	---	---	---	30	1.20	32.0	----	----	50	
8	Coal stock house	07.10.2015	---	---	---	---	30	1.20	22.8	----	----	50	
9	Production Separation bin-1	08.10.2015	---	---	---	---	30	1.20	41.9	----	----	50	
10	Production Separation bin-2	08.10.2015	---	---	---	---	30	1.20	34.0	----	----	50	
11	Transfer House	08.10.2015	---	---	---	---	30	1.20	48.6	----	----	50	

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS : 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm ³)	IS 11255 (Part 2) : 1985 (reaffirmed 2014)
NO ₂ (mg/Nm ³)	IS 11255 (Part 7) : 2005 (reaffirmed 2005)

Note :
 SO₂ - Sulphur dioxide
 NO₂ - Nitrogen dioxide
 PM - Particulate matter

Analyzed By
 Environmental Engineer.
 G.Aarathi

Authorised signatory
 Technical Manager
 K.Ramakrishna Reddy

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STACK MONITORING RESULTS

Annexure - 2/A

1. Name of the Industry : BMM Ispat Ltd., Danapur , Hospet Taluk, Bellary district.
2. Sample collected by : GLOBAL Environment & Mining Services
3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1
4. Month : October - 2015 (**1st Fort Night**)

Sl. No	Stack Attached to	Date of Monitoring	Fuel Used	Ta °C	TS °C	V m/Sec	HEIGHT (m)	Diameter (m)	Results			Standards PM (mg/ Nm ³)
									PM	SO ₂ mg/Nm ³	NO ₂ mg/ Nm ³	
Chimneys attached to Bag Filter (De dusting Units)												
2X500 TPD Sponge Iron Kiln 3&4												
12	Coal Primary Screen		---	---			30	1.20	Not in Operation			50
13	Coal Stock House -1 & coal stock house-2		---	---			30	1.20	Not in Operation			50
14	Cooler Discharge -1	09.10.2015	---	---			30	1.20	49.2	----	----	50
15	Cooler Discharge -2 & PSB transfer tower	09.10.2015	---	---			30	1.20	34.3	----	----	50
16	Production Bunker & Intermediate bin		---	---			30	1.20	Not in Operation			50
17	Production Separation bin	09.10.2015	---	---			30	1.20	36.3	----	---	50
18	Pellet Stock house		---	---			30	1.20	Not in Operation			50
19	Dolochar Stock House 1 & 2		---	---			30	1.20	Not in Operation			50
20	CPU Building		---	---			30	1.20	Not in Operation			50

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS : 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm ³)	IS 11255 (Part 2) : 1985 (reaffirmed 2014)
NO ₂ (mg/Nm ³)	IS 11255 (Part 7) : 2005 (reaffirmed 2005)

Note :
 SO₂ - Sulphur dioxide
 NO₂ - Nitrogen dioxide
 PM - Particulate matter

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 G.Aarathi

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STACK MONITORING RESULTS

Annexure - 2/B

1. Name of the Industry : BMM Ispat Ltd., Danapur, Hospet Taluk, Bellary district.
2. Sample collected by : GLOBAL Environment & Mining Services
3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1 **Month : October - 2015 (2nd Fort Night)**

Si. No	Stack Attached to	Date of Monitoring	Fuel Used	Ta °C	TS °C	V m/Sec	HEIGHT (m)	Diameter (m)	Results			Standards PM (mg/ Nm ³)	
									PM mg/Nm ³	SO ₂ mg/Nm ³	NO ₂ mg/Nm ³		
1	Pellet Plant-2 ESP	19.10.2015	Coal	ShutDown									50
2	2X500TPD Sponge iron kiln1&2 ESP	20.10.2015	Coal	30	147	5.85	70	3.00	64.3	62.6	2.76	100	
3	2X500TPD Sponge iron kiln3&4 ESP	21.10.2015	Coal	31	143	5.87	70	3.00	64.5	54.28	6.12	100	
4	1 X 70MW-CFBC Boiler ESP	23.10.2015	Coal	30	159	6.00	70	3.00	60.9	58.84	8.64	100	
5	2X70MW -CFBC Boiler ESP	24.10.2015	Coal	32	165	6.10	110	8.00	48.7	60.62	10.14	50	
6	SMS	26.10.2015	Coal	31	104	13.47	86	2.40	42.5	-	-	150	
7	Barmill	27.10.2015	-	30	259	8.14	87	3.00	39.2	-	-	150	
Chimneys attached to Bag Filter (De dusting Units)													
Beneficiation Plant-2													
1	Iron Ore Cone Crusher	Not in Operation										50	
2	Iron Ore Screening	Not in Operation										50	
Pellet Plant-2													
3	Additive grinding mill	Shut Down										50	
4	Mixer building	Shut Down										50	
5	Pellet discharge point	Shut Down										50	
2 X 500 TPD Sponge Iron Kiln 1 & 2													
6	Cooler Discharge -1	20.10.2015	---	---	---	---	30	1.20	31.3	----	----	50	
7	Cooler Discharge -2	21.10.2015	---	---	---	---	30	1.20	36.8	----	----	50	
8	Coal stock house	21.10.2015	---	---	---	---	30	1.20	45.0	----	----	50	
9	Production Separation bin-1	21.10.2015	---	---	---	---	30	1.20	29.3	----	----	50	
10	Production Separation bin-2	23.10.2015	---	---	---	---	30	1.20	38.9	----	----	50	
11	Transfer House	23.10.2015	---	---	---	---	30	1.20	24.8	----	----	50	

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS : 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm ³)	IS 11255 (Part 2) : 1985 (reaffirmed 2014)
NO ₂ (mg/Nm ³)	IS 11255 (Part 7) : 2005 (reaffirmed 2005)

Note :
 SO₂ - Sulphur dioxide
 NO₂ - Nitrogen dioxide
 PM - Particulate matter

Analyzed By
 Environmental Engineer
 G.Aarathi

Authorised signatory
 Technical Manager
 K.Ramakrishna Reddy

Note:

1. The results listed refer only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.
2. Samples will be destroyed after one month from the date of issue of test certificate unless otherwise specified.
3. This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not be used any advertising media without special permission in writing.
4. Total liability of our laboratory is limited amount. Any dispute arising out of this report is subject to Bangalore jurisdiction only.



STACK MONITORING RESULTS

Annexure - 2/B

1. Name of the Industry : BMM Ispat Ltd., Danapur , Hospet Taluk, Bellary district.
2. Sample collected by : GLOBAL Environment & Mining Services
3. Particulars of sample collected : Vayubodhan Stack sampler VSS 1
4. Month : October- 2015 (2nd Fort Night)

Sl. No	Stack Attached to	Date of Monitoring	Fuel Used	Ta °C	TS °C	V m/Sec	HEIGHT (m)	Diameter (m)	Results			Standards PM (mg/ Nm3)
									PM mg/Nm ³	SO ₂ mg/Nm ³	NO ₂ mg/Nm ³	
Chimneys attached to Bag Filter (De dusting Units)												
2X500 TPD Sponge Iron Kiln 3&4												
12	Coal Primary Screen		---	---			30	1.20	Not in Operation			50
13	Coal Stock House -1 & coal stock house-2		---	---			30	1.20	Not in Operation			50
14	Cooler Discharge -1	23.10.2015	---	---			30	1.20	36.9	----	----	50
15	Cooler Discharge -2 & PSB transfer tower	24.10.2015	---	---			30	1.20	45.8	----	----	50
16	Production Bunker & Intermediate bin		---	---			30	1.20	Not in Operation			50
17	Production Separation bin	24.10.2015	---	---			30	1.20	38.0	----	---	50
18	Pellet Stock house		---	---			30	1.20	Not in Operation			50
19	Dolochar Stock House 1 & 2		---	---			30	1.20	Not in Operation			50
20	CPU Building		---	---			30	1.20	Not in Operation			50

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS : 11255 (Part 1) - 1985 (reaffirmed 2009)
SO ₂ (mg/Nm ³)	IS 11255 (Part 2) : 1985 (reaffirmed 2014)
NO ₂ (mg/Nm ³)	IS 11255 (Part 7) : 2005 (reaffirmed 2005)

Note :
 SO₂ - Sulphur dioxide
 NO₂ - Nitrogen dioxide
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